Linux NCD mini−HOWTO

Table of Contents

Linux NCD mini−HOWTO

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This document tries to describe how to hook up a NCD ThinSTAR to your local network using a Linux box as server.

7.History

1.Introduction

We could play around with a NCD ThinSTAR for a while. Although MS NT Terminal and Citrix Meta− & Winframe are the only supported OS systems ("Powered by Windows CE" is on the cover ...), it works fine with Linux too. This is how !

The machine we had, was a NCD ThinkSTAR 200. It is powered by a 100MHz MIPS 4300 processor and had the default 8MB of RAM memory. NCD has a also other products in the ThinSTAR family. These might also work, but we haven't the opportunity to check those. If you have any of those, feel free to add any comments. Or send them to us to experiment.

This HOWTO will present one way to setup your ThinSTAR to be used in a Linux environment. This isn't much of a big deal, but for what it's worth I'll descripe the needed steps here.

This MINI Howto is not trying to be the Bible on NC's and Linux, its trying to be something for you to get started from nowhere. Contributions to this NC are welcome. In fact this HOWTO is fully based on the NC−HOWTO by Kris Buytaert in which he describes how to setup the IBM Network Station.

2.Requirements

2.1 Hardware

An NC, connected to your local Network, most likely by UTP, thus by a cross−cable or HUB connecting to an X Server. Herafter called the Linux Box. The NC can be used as an X−terminal, and in this way can be used to replace an Windows Terminal server or simular application.

The NCD−ThinSTAR 200 is in way related to the IBM Network Station model 8361−100. Both machines share a lot of components such as some S3 vga components, IO , network and and normal 72pins (parity ??) sims. The motherboard is also from the same manufacturer.

The NCD worked quit fine on my network at home, but we had some trouble to get it running again on an other location. After a while we found out that the problem where the monitors. The NC does not seem to support all older monitors, even at low resolutions and refresh rates.

The Linux box does not require any special tricks: any X−server with xdm, gdm or something similar will do. We will use xdm.

2.2 Software

X Server.

Any machine running XDM with enough memory, processor power will do. You don't need to have X configured on the machine itselve, it can perfectly be a headless server. Basic X Windows install will provide you with the necessary deamons.

DHCP Mini Howto on sunsite

3.Other Usefull Documentation

Mainly the NCD website at http://www.ncd.com.

4.Setting up the Serverside

4.1 Setting up the X server

Next we have to set up the X server. Basically I didn`t need to set up anything, all of my machines that ran X−Windows were configured to accept connections. I just started up the NC for the first time and it showed me all the machines that ran an XDM (cfr running an X −indirect). So any machine that can run xdm can be used as X Server. Just make sure XDM is So any machine that can run xdm can be used as X Server. Just make sure XDM is started.

Everything on the server side should be setup now. Lets try the NC side.

5.Configuring the Thin Client

Unplug the network cable from the NC. Then boot it up.

It will boot and display that fine NCD ThinSTAR logo but alse the ugly Windows CE stuff :−)). After the NC has booted, it displays the NCD ThinSTAR setup wizard (if you already have been using the NC, it will not show the wizard, but by pressing ALT−CTRL−F2 you can still reconfigure the system). The first selection is the most important one: Client selection. Be sure to change this to NCD ThinSTAR X Client.

Then you have to setup the NC's IP address. We did pick a static IP. You can also specify a DNS server, but this is not needed. To finish pick your monitors resolution. The NC should be restarted now. (Windows CE Remember ;−))

After a while you will see the NCD ThinSTAR Connection Manager on your screen. First you can continue configuring your system by pressing ALT+CTRL+F2. Things to be configured are: keyboard and mouse. This panel also allows you to reconfigure other parts of your NC. Press OK to commit changes, and you will return to the NCD ThinSTAR Connection Manager.

The NCD ThinSTAR Connection Manager gives 2 options: connections and configure. So lets configure the system first. Pick 'X terminal' from the menu and press the edit or add button.

The NCD ThinSTAR X Connection Properties allows you to configure the name, connection options, host and color. We prefer the these settings: * Connection Option : XDM Query * Host: specify when connection is made * (other settings are not important) You could also specify a fixed X server but the broadcast option is easier.

Basicly your done now and you should be able to start a session by double−clicking the connection you just edited or added. You should get a list with all the X servers you are using.

6.Credits

A lot of thanks go to Kris Buytaert ,kris.buytaert@advalvas.be for rereading this howto and findin uot lost of splelling errosr.

7.History

19990812 first draft 19990829 typos fixed 19990901 release
